Trinity River Restoration Program
P.O. Box 1300, 1313 South Main Street, Weaverville, California 96093;
Telephone: 530-623-1800, Fax: 530-623-5944

October 21, 2002

Interested Parties

Subject: Fiscal Year 2003 Budget - Trinity River Restoration Program Request for Proposals and Project Descriptions - Reply Due November 29, 2002

Dear Ladies and Gentlemen:

This letter is a request for project descriptions, applications for funding, and proposals (RFPs) to help implement tasks outlined in the enclosed fiscal year 2003 program of work for the Trinity River Restoration Program (TRRP). On September 25, 2002, the Trinity Management Council (TMC) approved the fiscal year 2003 budget in concept. Because appropriation bills for both the U.S. Fish and Wildlife Service and Bureau of Reclamation have not been approved by Congress and signed by the President, estimates of funding are subject to change. Modifications to the budget may be necessary as final funding levels are announced, but enough information is available to initiate the RFP and application process.

This year's budget should be similar to fiscal year 2002 in size and scope for most elements. It does, however, include a significant increase in the Restoration and Rehabilitation component of the program due to planned replacement of four bridges. Most of this projected increase is based on a request for Central Valley Project Improvement Act (CVPIA) Restoration Funds. The amount of funding we will actually receive is unknown at this time.

During our critique of the fiscal year 2002 budget process, it was recognized that a formal call letter, along with format, content, and time requirements would result in more efficient administration of subsequent grants and agreements. This letter provides that information.

In fiscal year 2003 we are trying to clarify the basic categories of projects and tasks, how funds are managed, and who is eligible to apply for them. The three categories of tasks include:

- Basic program administration: This includes administrative costs for TMC members, support costs for the Trinity Adaptive Management Working Group (TAMWG), and operating costs of the Restoration Program office in Weaverville, including salaries, rent, utilities, supplies, etc.

- On-going activities: This category includes bridge construction projects, planning for channel restoration sites, monitoring and maintenance of streamflow gaging stations, marking and tagging operations, carcass surveys, and other similar activities.

- New tasks: New projects and tasks include redd scour data collection, quick response monitoring capabilities for chinook mortality, green sturgeon habitat studies, and evaluation of past watershed restoration efforts, among others.

There are two primary ways in which funds are managed and expended: internally (by funding agencies, i.e., Reclamation, and the Service), and externally (through contracts, grants, and agreements with consultants, agencies, and Tribes). External expenditures require applications for funding (see enclosed forms) as part of a proposal, but internal expenditures by funding agencies do not. In both situations, however, the parties need to describe the project or task using the enclosed content outline.

In addition, applications for external expenditures may be competitive or non-competitive. Program administration and on-going activities by single entities are considered to be non-competitive. Based on the fiscal year 2002 program of work, initial funding amounts and recipients have been identified. This RFP process also describes which projects and tasks are open for competitive proposals. Funding recipients and amounts for tasks involving new proposals and/or multiple proponents of on-going activities will be allocated based on responses to this call letter.

To the extent possible, combined proposals should be submitted for projects that have traditionally been a joint effort among several agencies or Tribes. Roles and responsibilities should be clearly identified, including geographical divisions of labor, so that duplicate efforts and inefficiencies are avoided. If combined proposals are not possible, coordination among the parties should occur with results documented in each separate proposal.

Please contact the following individuals at 530-623-1800 for more detailed information as you prepare your proposals for fiscal year 2003:

• Doug Schleusner, Executive Director	Program Administration
• Ed Solbos, Implementation Branch Chief	Overall Restoration Tasks
• Daryl Peterson, Monitoring and Analysis Branch Chief	Overall Monitoring Tasks
• Andreas Krause, Hydraulic Engineer	Hydrology, Geomorphology
• Robert Sullivan, Wildlife Biologist	Riparian, Wildlife
• Glenn Yoshioka, Fisheries Biologist	Fish Physiology, Habitat

Thank you for your interest in and commitment to the Trinity River Restoration Program. Feel free to contact me if you have any questions about the fiscal year 2003 budget or this call letter.

Sincerely,

/s/ Douglas P. Schleusner

Douglas P. Schleusner
Executive Director

Enclosures

Table of Contents

1. Primary Goals and Objectives for the FY 2003 Program of Work

The following goals and objectives have been adopted by the TMC as the basic foundation for this year's activities. They are not all inclusive, and will be refined and expanded by the Adaptive Environmental Assessment and Management (AEAM) staff.

Program Administration

- **The SEIS will be completed and comply with all legal/judicial requirements by the 2004 water year (***specific objectives established by the four co-leads***).**

- **The TMC will actively guide and support program goals through participation of its members and commitment of individual agency/tribal resources.**

- **The AEAM Team (Weaverville Office) will be fully staffed, operational, and actively participating in all aspects of the program by November 2002.**

- **Members of the Trinity Adaptive Management Working Group (TAMWG) will be announced, and begin meeting in their advisory capacity by November 2002.**

- **Members of the Science Advisory Board will be selected, and begin meeting by March 2003.**

- **Design and implement an active education and outreach program to improve public awareness, understanding, and acceptance of restoration efforts.**

Rehabilitation and Implementation

- **All bridges and floodplain structures will be able to pass "extremely wet year" ROD flows (11,000 cubic feet per second) by May 2004.**
  - ✓ *Complete NEPA analyses, permit compliance, engineering designs, and construction contracts for all four bridges.*
  - ✓ *Inventory and analyze all floodplain structures at risk from ROD flows.*

- **The first group of channel restoration projects will be ready for implementation by the end of FY 2003.**
  - ✓ *Continue NEPA analyses for the first group of 25 potential sites.*
  - ✓ *Complete designs for the first group of 16 channel restoration sites.*
  - ✓ *Complete NEPA analyses, permits, designs, and construction contracts for pilot sites and the Rush Creek delta project.*

- **Simplify administration and implementation of routine maintenance of the Grass Valley Creek - Hamilton Pond catchment basins.**
  - ✓ *Complete the RCD/NRCS/BLM study of pond capacity and efficiency.*
  - ✓ *Continue annual maintenance dredging in the interim, as needed.*
  - ✓ *Develop and implement a multi-agency agreement for long-term or multi-year permits for routine pond maintenance.*

Monitoring and Analysis

- **A comprehensive gravel management plan will be available to guide proposed introductions, including but not limited to source and destination locations, methods, timing, and quantities.**
  - ✓ *The Phase 1 Plan will be distributed for review and comment by October 2002, with the objective of obtaining sufficient information to guide possible high flow gravel introductions in May 2003.*
  - ✓ *A technical workshop will be convened to solicit recommendations on the scope of work, level of detail, and timing of the Phase 2 effort.*
  - ✓ *The Phase 2 Plan will be completed by June 2003.*

- **Improved analysis and reporting capabilities for anadromous fish and river-related resources will be available for budget and program planning purposes by FY 2004.**
  - ✓ *Continue current monitoring activities in the interim.*
  - ✓ *Compile, analyze, and prepare status reports for each major resource area for the period December 2000 - September 2003.*
  - ✓ *Develop a comprehensive and integrated monitoring structure and process to guide monitoring activities in future years.*

- **Complete a comprehensive review of past watershed restoration activities.**
  - ✓ *Conduct an independent and comprehensive review of past watershed restoration activities in the Grass Valley Creek watershed. Describe past and current conditions, locate and describe all watershed restoration sites including cost.*

2. Proposal Format and Submittal Requirements

1. The following format and content requirements apply to all proposals for FY 2003, both competitive and non-competitive. This also applies to projects and tasks implemented by the primary funding agencies, i.e., Reclamation and the Service. Streamlined proposal requirements will be developed for on-going projects in future years.
2. Proposals should be prepared using Microsoft Word, and address the content requirements in the following outline (Item 4, pages 4-5).
3. Proposals should be received by the Trinity River Restoration Program office by the specified due date (November 29, 2002) in both of the following formats:
   - Submit electronically to dljackson@mp.usbr.gov.
   - Send a hard copy by regular mail to:

     Trinity River Restoration Program
     P.O. Box 1300, Weaverville, CA 96093
4. Proposals submitted after the closing date or without the necessary information may not receive full consideration or may result in processing delays.
5. Proposals will be reviewed by the AEAM staff for effectiveness in achieving program goals, potential overlap with other proposals, and opportunities to improve cooperation among participants. The Executive Director will submit recommendations to the TMC for final approval.

3. Time Schedule and Due Dates

TASK	DATE	REMARKS
TMC Approves Budget in Concept	September 25, 2002	Pending outcome of final appropriation bills and agency allocations.
RFP Call Letter	October 21, 2002	Distributed by Executive Director.
RFP Closing Date	November 29, 2002	Proposals due to Program Office.
Budget Revised by B-Team and Changes Submitted to TMC for Approval	Late November, 2002	Timing and extent of changes based on final appropriations, CVPIA funding, and national/regional allocations.
Evaluation of Proposals	December, 2002	Reviewed by AEAM staff and recommended by Executive Director.
Notification of Awards	Early January, 2003	Preliminary funding amount sent to proponents; timing may change depending on previous step.
Completion of Agreements	Late January, 2003	Submitted to Mid-Pacific Region.
Funding Available to Recipients	March-April, 2003	Within 60-90 days of submittal.

4. Proposal Content

Cover page containing items 1-4.

1. Project proponent and contact information
    - Name of the organization and primary contact
    - Mailing address and telephone number
2. Project title
    - Descriptive title of your specific proposal (e.g., Hamilton Ponds Dredging)
    - Budget category, sub-category, and element from the attached budget tables (e.g., Monitoring and Analysis; Hydrology/Geomorphology; Sediment Management)
3. Physical location and description
    - Legal (township and range) and UTM coordinates (if available)
    - River mile (if applicable)
4. Project abstract
    - One paragraph summarizing items 5 and 6

4. Proposal Content (continued)

Body of the proposal containing items 5-7.

5. Background and status
    - Need for the project
    - General physical setting
    - Related work completed or in progress
    - Role of proponent organization in Restoration Program
    - Describe proponent's facilities, resources, and equipment available for the project
6. Scope of work
    - Goals and objectives, including relevance of project to Restoration Program
    - Methodology, including data collection and staffing requirements
    - Key personnel and qualifications, including sub-contractors
    - Measurable results and benefits, including monitoring plan and basis for management recommendations
    - Time schedule, including key mile stones and completion date
    - Deliverables, including types of data to be collected and reported (format requirements for electronic copies of data, reports, photos, etc, including GIS-related products, will be specified in the funding agreement)
7. Project costs and proposed budget
    - Provide a detailed breakout including salaries, materials and supplies, equipment, travel, and any other significant expense categories
    - Include personnel data including title, salary or wage, amount of time, and benefits
    - For travel costs, include purpose, location, and projected dates
    - For major equipment, provide description and whether it will be leased or purchased
    - Identify material and supplies requirements
    - Identify consultant's fees and subcontracts
    - Include any proposed inflation factors and salary increases
    - If appropriate, provide information on cost sharing amounts, sources, and what items will be funded by the cost share
    - Describe indirect cost rate agreement or a proposed computational basis for determination of a rate
    - Include general information on the reasonableness, allowability, and necessity of the proposed budget category that includes the proposal
    - Complete and submit an Application for Federal Assistance (Standard Forms 424, 424A, 424B, 424C, and 424D) as appropriate

5. Approved Tasks and Estimated Funding Available

FY 2003 Budget (Approved by TMC in concept, 9/25/02)

PROGRAM ADMINISTRATION	Category	Amount	Recipients or Fund Managers
AEAM Team - Weaverville Office			
Personnel (salary, relocations)	Admin	$1,063,500	USBR
Office Operations (rent, utilities, supplies)	Admin	$137,400	USBR
Public Information (workshops, brochures)	Admin	$40,000	USBR,RCD
Subtotal		**$1,240,900**	
Trinity Management Council			
Administration			
Bureau of Reclamation	Admin	$25,000	USBR
Fish & Wildlife Service	Admin	$150,000	FWS
Hoopa Valley Tribe	Admin	$150,000	HVT
Yurok Tribe	Admin	$150,000	YT
CA Dept of Fish & Game	Admin	$150,000	DFG
CA Dept of Water Resources	Admin	$150,000	DWR
Trinity County	Admin	$50,000	TC
Subtotal		**$825,000**	
Trinity Adaptive Management Working Group			
Administration			
Support Functions	Admin	$25,000	FWS
Reimbursable Travel	Admin	$30,000	FWS
Subtotal		**$55,000**	
Independent Review Committees			
Science Advisory Board			
Support Functions	Admin	$10,000	USBR
Reimbursable Travel	Admin	$20,000	USBR
Subtotal		**$30,000**	
Information Management			
Spatial/GIS	Admin	$175,000	FWS,HVT,YT,RCD
Remote Sensing/Aerial Photography	Admin	$50,000	USBR
Subtotal		**$225,000**	
Supplemental EIS - *temporary*			
Contracts/Amendments	Admin	$100,000	USBR
Agency Participation (co-leads)	Admin	$300,000	USBR,FWS,HVT,TC
Subtotal		**$400,000**	
Total Program Administration		**$2,775,900**	

Abbreviations:

USBR	Reclamation	HVT	Hoopa Valley Tribe
FWS	Fish & Wildlife Service	YT	Yurok Tribe
DFG	CA Dept of Fish & Game	TC	Trinity County
DWR	CA Dept of Water Resources	RCD	Resource Conservation District
BLM	Bureau of Land Management	USFS	Forest Service

REHABILITATION AND RESTORATION	Category	Amount	Recipients or Fund Managers
Bridges and Structures			
Environmental Compliance and Permits			
NSR NEPA Contract Admin	On-going	$50,000	USBR
Implementation			
Construction Contract 4 Bridges	On-going	$4,350,000	USBR
Floodplain Structures Relocation	On-going	$100,000	USBR,TC
Subtotal		**$4,500,000**	
Channel Restoration			
Implementation			
Rush Creek Delta Removal Contract	On-going	$200,000	USBR
Mechanical Site Rehab Contract 2 Pilots	On-going	$500,000	USBR
Bank Rehab Data Collection for Design	On-going	$50,000	USBR
Subtotal		**$750,000**	
Gravel Introductions			
Environmental Compliance and Permits			
NEPA Gravel Projects	On-going	$40,000	USBR
Implementation			
Long Term Gravel Introductions	On-going	$200,000	USBR
Subtotal		**$240,000**	
Sediment Management			
Implementation			
Hamilton Ponds Dredging	On-going	$150,000	TCRCD
Subtotal		**$150,000**	
Tributaries			
Implementation			
Trinity County Watershed Grants	On-going	$200,000	TC
Subtotal		**$200,000**	
Total Rehabilitation and Restoration		**$5,840,000**	

Abbreviations:

USBR	Reclamation	HVT	Hoopa Valley Tribe
FWS	Fish & Wildlife Service	YT	Yurok Tribe
DFG	CA Dept of Fish & Game	TC	Trinity County
DWR	CA Dept of Water Resources	RCD	Resource Conservation District
BLM	Bureau of Land Management	USFS	Forest Service

MONITORING AND ANALYSIS	Category	Amount	Recipients or Fund Managers
Hydrology/Geomorphology			
Streamflow Gaging	On-going	$150,000	HVT,DWR,USGS
Sediment Monitoring			
Deadwood, Grass Valley, Rush, Indian Creeks	On-going	$184,000	HVT
Sediment Management			
Refine/Calibrate Transport Model	On-going	$115,000	USBR
Gravel Management Plan Phase 2	On-going	$40,000	USBR
Bank Rehab Sites Geomorphic Baseline Monitoring	On-going	$40,000	HVT
Review/Evaluate Watershed Activities	New	$20,000	Open
Subtotal		**$549,000**	
Fish Physiology			
Temperature Monitoring			
Water Temperature Monitoring	On-going	$25,000	FWS
Smolt Health			
Lab Studies, Smolt Response to Thermal Conditions	On-going	$25,000	FWS
Timing of Fry Emergence, Smolt Production	On-going	$154,700	FWS,YT
Hatchery Practices, Fingerling vs. Yearling Releases	On-going	$75,000	HVT,YT
Adult Health			
Thermal History/Tolerance, Egg viability study	New	$90,000	Open
Quick Response, Chinook Mortality Monitoring	New	$25,000	Open
Radio Tracking, Spring Chinook/Refugia	New	$50,000	Open
Subtotal		**$444,700**	
Fish Habitat/Management			
Spawning Surveys			
Carcass Surveys	On-going	$140,000	FWS,HVT,YT,DFG
Fall Run Scale Analysis, Age Composition	On-going	$70,000	FWS,HVT,YT
Spring Run Scale Analysis, Age Composition	New	$26,400	Open
Redd Scour Data Collection	New	$30,000	Open

Abbreviations:

USBR	Reclamation	HVT	Hoopa Valley Tribe
FWS	Fish & Wildlife Service	YT	Yurok Tribe
DFG	CA Dept of Fish & Game	TC	Trinity County
DWR	CA Dept of Water Resources	RCD	Resource Conservation District
BLM	Bureau of Land Management	USFS	Forest Service

MONITORING AND ANALYSIS (continued)	Category	Amount	Recipients or Fund Managers
Fish Habitat/Management (continued)			
Emigration Surveys			
Emigration Estimates, Lower Trinity	On-going	$180,000	FWS,YT
Emigration Estimates, North Fork	On-going	$180,000	FWS,HVT
Marking and Tagging			
CWT Marking at Hatchery	On-going	$360,000	HVT
Chinook Tag Decoding at Hatchery	On-going	$16,000	DFG
Mark Hatchery Steelhead	On-going	$72,000	HVT
Mark Hatchery Coho	On-going	$26,000	DFG
Run Size/Angler Harvest	On-going		
Run Size/Harvest Estimates, incl. Reward Tags	On-going	$382,000	HVT,DFG
Angler Harvest, Estuary to Coon Creek	On-going	$65,000	DFG
Angler Harvest, Weitchpec to Hawkins Bar	On-going	$72,000	HVT
Angler Harvest, Spring Chinook	New	$50,000	Open
Tribal Harvest Survey, Lower Klamath	On-going	$150,000	YT
Baseline Monitoring			
Fish Habitat/Physiology Monitoring Workshop	On-going	$40,000	USBR
Bank Rehab Sites, Biological Baseline Data Collection	On-going	$250,000	FWS,HVT,YT
ESA, Coho Recovery Plan Coordination	New	$20,000	Open
Green Sturgeon Habitat Use, Trinity/Lower Klamath	New	$50,000	Open
Subtotal		**$2,179,400**	
Riparian/Wildlife			
Inventory and Mapping			
Riparian Habitat Mapping, Mainstem Trinity River	New	$100,000	Open
Baseline Monitoring			
Riparian/Wildlife Monitoring Workshop	New	$40,000	USBR
Riparian Vegetation Monitoring, Proposed Bank Rehab Sites	New	$100,000	Open
Baseline Biological Monitoring	New	$100,000	Open
Subtotal		**$340,000**	
Total Monitoring and Analysis		**$3,513,100**	
Total Budget		**$12,129,000**	

Abbreviations:

USBR	Reclamation	HVT	Hoopa Valley Tribe
FWS	Fish & Wildlife Service	YT	Yurok Tribe
DFG	CA Dept of Fish & Game	TC	Trinity County
DWR	CA Dept of Water Resources	RCD	Resource Conservation District
BLM	Bureau of Land Management	USFS	Forest Service

6. New Projects/Tasks Open to Competitive or Multiple Proponent Proposals

PROGRAM ADMINISTRATION

AEAM Team – Weaverville Office

Public Information: $40,000

Work with the AEAM staff to provide multi-media tools and products that will assist in developing the Restoration Program's identity, including design and implementation of an active information, education, and outreach program to improve public awareness, understanding, and acceptance of restoration efforts.

Information Management

Spatial/GIS: $175,000

Assist in the development of the Restoration Program's GIS capabilities, including compilation of relevant databases, construction of a database library, and improved data access for all GIS users. In addition, provide for maintenance and biannual updates of the Klamath Resource Information System (KRIS).

Supplemental EIS

Agency Participation (co-leads): $300,000

Reclamation, Hoopa Valley Tribe, U.S. Fish and Wildlife Service, and Trinity County will continue to coordinate and manage preparation of the Supplemental EIS, Trinity River Mainstem Fishery Restoration, including preparation of CEQA mitigation measures appendix.

REHABILITATION AND RESTORATION

Bridges and Structures

Floodplain Structure Relocations: $100,000

The purpose of this action is to enable releases as high as 11,000 cfs from Lewiston Dam without causing damage or increasing the risk of damage to private properties within the flood plain. The hydraulic flow study prepared by the Department of Water Resources in July 2001 will be used to obtain water surface elevations for a ROD release of 11,000 cfs at the location of potentially affected improvements. Trinity County will utilize $50,000 in program funding to contract with a licensed land surveyor to establish precise elevations of the existing improvements, developing topographic mapping and property boundary surveys as necessary. The County will also work with landowners and contract with a Registered Professional Engineer to develop plans, specifications, and cost estimates for engineered protection measures. Environmental documentation to comply with CEQA will be prepared and state and local permits will also be obtained. The Trinity River Restoration Program Office will utilize $50,000 to provide engineering and survey support and also award construction contracts and provide construction management subject to availability of funds. The office will also perform any necessary ESA consultations and Federal NEPA compliance and permit actions in coordination with the County.

MONITORING AND ANALYSIS

Hydrology/Geomorphology

Streamflow Gaging: $150,000

Operation and maintenance of existing stream flow gaging stations on the Trinity River mainstem and tributaries downstream of Lewiston Dam by the U.S. Geologic Survey, California Department of Water Resources, and the Hoopa Valley Tribe.

Sediment Management

Evaluation of Grass Valley Creek Watershed Activities: $20,000

Conduct a comprehensive review of past watershed restoration activities in the Grass Valley Creek watershed. Describe past and current conditions, locate and describe all watershed restoration sites including cost. Provide a GIS layer with project locations and funding agency. Assess results and effectiveness of the restoration projects with respect to sediment reduction. Identify possible development issues that could potentially impact the watershed. Recommend and prioritize future restoration actions.

Fish Physiology

Smolt Health

Timing of Fry Emergence, Smolt Production: $154,700

Characterize fry emergence and habitat densities temporally and spatially in the Trinity River, by reach, from Lewiston Dam to the North Fork Trinity River.

Hatchery Practices, Fingerling vs. Yearling Releases: $75,000

The Trinity River hatchery will be evaluated as to its operational effectiveness in production of steelhead and salmon. Practices will be reviewed and considered in the context of the Endangered Species Act (ESA) compliance and trust evaluation obligations.

Adult Health

Thermal History/Tolerance, Egg Viability Study: $90,000

Establish continuous monitoring of water temperatures at locations used previously for SNTEMP model to determine if temperature targets are met with specified flow regimes implemented as part of the ROD. Conduct laboratory studies to measure physiological response and performance of Steelhead, Coho and Chinook salmon adults and eggs exposed to a range of thermal conditions.

Quick response spring run mortality monitoring: $25,000

Develop protocols for real-time monitoring to anticipate and respond to the primary causes of adult salmon mortality. Determine thresholds for the causes and conditions that promote gill-rot in salmon.

Radio tracking spring Chinook/refugia: $50,000
Conduct field studies to identify and quantify adult spring chinook salmon up-migration and holding timing and locations. This work should include evaluation of pool depth, water temperature, dissolved oxygen and other important parameters to assist in developing models for real-time summer flow management for spring chinook.

Fish Habitat/Management
Spawning Surveys
Carcass and Redd Surveys: $140,000
Provide information on the distribution and abundance of redds in the mainstem Trinity River, while also recovering coded wire tags and other CDFG program tags from carcasses to aid in estimating ratios of hatchery to natural in-river fish.

Fall Run Scale Analysis, Age Composition: $70,000
Conduct age composition analysis of scale data. Due to the variable age at maturity for fall chinook salmon age composition data is needed along with spawning escapement and harvest data to assess brood year production.

Spring run scale analysis, age composition: $26,400
Perform an estimate of brood year production by conducting a scale analysis of adult spring run chinook salmon to determine the age composition of the 2003 cohort. This data can be combined with spawning escapement and harvest data to estimate brood year production.

Redd scour data collection: $30,000
Field studies to relate peak river discharge/stage to redd scour depth and egg mortality to determine the probability that piggybacking dam releases on tributary flood events decreases smolt production.

Emigration Surveys
Emigration Estimates, Lower Trinity: $180,000
Long term monitoring of annual juvenile salmon and steelhead numbers provide necessary information to assess management and restoration actions and to estimate brood year production.

Emigration Estimates, North Fork: $180,000
Long term monitoring of annual juvenile salmon and steelhead numbers provide necessary information to assess management and restoration actions and to estimate brood year production.

Run Size/Angler Harvest
Run Size/Harvest Estimates, incl. Reward Tags: $382,000
Estimate run size and harvest levels through operation of the Junction City and Willow Creek weirs, including hatchery/natural ratios. Administer reward tag program.

Angler harvest spring Chinook: $50,000
Conduct creel surveys to estimate angler harvest for 2003 within a specific reach of the Trinity River.

Baseline Monitoring
Bank Rehab Sites, Biological Baseline Data Collection: $250,000
Map habitat in restoration and control sites using existing aerial photography and GPS equipment. Estimate fish species/life-stage densities by habitat type through snorkeling, electrofishing, or other capture methods. Mapped habitat areas and quantified species/life history densities by habitat type will be used to estimate populations within restoration and control sites.

ESA, Coho Recovery Plan Coordination: $20,000
Determine relationship of coho recovery plan goals with other management efforts related to fall and spring run chinook and steelhead. Identify Endangered Species Act requirements that have a direct bearing on other activities in the FY 2003 program of work. Develop framework for interagency coordination to improve overall management of multiple species.

Green Sturgeon Habitat Use, Trinity/Lower Klamath: $50,000
Green sturgeon spawning sites will be located in the Klamath/Trinity basin using a variety of methods, including use of hand-held GPS units, and combined with meso-habitat data provided by the U.S. Fish and Wildlife Service. GIS data layers will be developed and provided to the Restoration Program office.

Riparian/Wildlife
Inventory and Mapping
Riparian Habitat Inventory and Mapping of the Mainstem Trinity River: $100,000
From existing aerial photos, satellite imagery, and ground-truthing: Conduct an intensive inventory of riparian/riverine and associated upland habitats along 40 miles of the mainstem of the Trinity River; Define current riparian/riverine and wildlife habitats using GIS/remote sensing predictive models and delineate key riparian plant species distributions.

A vegetation assessment along the river and associated uplands (500 meters) will include establishing transects throughout the region, determining the percentage of cover, plant density, and frequency data. Sample points will be mapped with a global position system with 1-3 m accuracy and overlaid on Thematic Mapper Landsat 7 (1999 and 2000) satellite imagery (EROS Data Center, USGS, Sioux Falls, South Dakota). Data overlays compiled from this project will be used to construct a Trinity River Mainstem plant community classification system, which will include a description of existing plant communities, photos of habitat types, associated flora, shape files and extent of species composition, soil descriptions, and other unique ecological features such as topography, and slope.

Sample data (points, layers) acquired from this study will be used in conducting future GIS/Remote Sensing supervised classifications and predictive models with current (1999) Thematic Mapper satellite imagery, future Digital Ortho-photography (DOQ's) projected for 2002-2003, and aerial photos. The overall product should be relevant to all managed wildlife species.

Baseline Monitoring

Riparian Vegetation Monitoring at Proposed Bank Rehabilitation Sites: $100,000

Establish and monitor riparian vegetation transects, including: Determine pre-construction conditions at 8 of 14 proposed bank rehabilitation sites (and 4 control sites as needed). Monitor seed dispersal and peak density timing for the eight key riparian hardwood species (focusing on narrow-leaf willow and black cottonwood), and quantify annual variability. Develop/apply Degree-Day model and assess its predictive ability to define specific stream-flow requirement for less frequently occurring hardwood species (refine water year type flow schedule and compare with actual).

Inventory seedlings and their bank locations at specified locations to assess correlation of WY 2002 flow schedule, seed dispersal and rooting locations. Quantify groundwater rate of change with the receding limb into summer/fall base-flow and lowest groundwater elevation to evaluate drought mortality as it relates to seedling success at different bank positions above the low water edge. Develop/refine, calibrate, and testing the box recruitment model to different platform arrangements to predict recruitment for 8-hardwood species at 4-bank rehabilitation sites, also make the model available for future bank rehabilitation site topographic design and monitoring.

Baseline Biological Monitoring: $100,000

Implement recommendations derived from the Riparian/Wildlife work shop and conduct baseline monitoring for amphibians, reptiles, and avian species at 8 of the 14-proposed bank rehabilitation sites and the 4 control sites (natural alternate bar and riparian berm locations). These studies must include a comprehensive inventory of the following plant and wildlife species:

(a) Yellow-legged Frogs - Conduct egg mass and larvae surveys in sampling units before and after scheduled peak flow releases. Collect habitat measurements to refine models and quantify habitat parameters associated with presence and abundance of Yellow-legged Frogs. Collect climatic measurements to develop a model of environmental conditions at the time of initiation of egg laying and test the model for predictive ability.

(b) Western Pond Turtles - Conduct turtle surveys in sampling units to compare post-implementation and baseline (1990-1994) density estimates. Collect measurements of habitat parameters associated with higher densities of turtles, i.e., size and depth of pools, flow velocity, water temperature, presence of underwater cover and emergent basking sites, to update models of turtle habitat associations and population changes.

(c) Riparian Corridor Nesting Birds - Conduct nest searches for Target Bird Species and monitor the nest locations during varied peak flow releases.

(d) Quantify and Map Habitat Characteristics Associated with Presence, Abundance, and Reproductive Success of Target Species. - Collect proximal data relevant to sampling units and species (i.e. substrate, temperature, plant stand structure and composition, etc.) for comparison of bank rehabilitation, riparian berm, and natural alternate bar sites at a range of flows and seasons.

(e) Willow Flycatcher - Collect presence and abundance information on the Willow Flycatcher using survey or capture techniques during spring, summer and fall. Map locations and monitor over time for changes in abundance.

(f) Riparian Bird Species - Conduct point count censuses within the sampling units and in adjacent upland habitats to detect changes in abundance and distribution of the bird species following implementation. Compare presence and abundance for species of concern (Willow Flycatchers, Yellow Warblers, Yellow-breasted Chats, Green-backed Herons, Tree Swallows, Bald Eagle, Osprey, and other aquatic and gravel-bar associated birds) with baseline (1990-1992) surveys. Collect habitat measurements, i.e. plant species composition, structure, area of habitat types, etc, to track possible changes and model associations of habitat characteristics and bird abundance.

In addition, develop hypotheses about how proposed construction activities, bank rehabilitation, flow release schedule, and water temperatures will affect targeted key indicator species. Integrate with proposed bank rehabilitation site design effort and development of improved flow release schedules. Develop appropriate mitigation recommendations.

7. Administrative or On-going Single Proponent Projects/Tasks

PROGRAM ADMINISTRATION

AEAM Team – Weaverville Office

Personnel and Office Operations: $1,200,900

Salary for fully staffed organization, plus relocation expenses (3-4 positions). Support costs including rent, utilities, janitorial, building management and security, equipment, supplies, vehicles, and travel.

Trinity Management Council

Administration: $825,000

TMC members will actively participate in setting program emphasis and by providing oversight of TRRP activities, through attendance at quarterly meetings, review of draft documents, provision of technical support, and interagency coordination.

Trinity Adaptive Management Working Group

Administration: $55,000

The Trinity Adaptive Management Working Group was authorized to allow stakeholders a formal avenue of participation in the Restoration Program. The Secretary of the Interior signed the charter for this federal advisory committee on March 18, 2002, and recommendations for membership were submitted shortly thereafter. Confirmation of membership and plans for the initial meeting this fall are envisioned in this task, which covers support functions provided by the U.S. Fish and Wildlife Service, lead agency for the advisory committee, and reimbursable travel expenses for the members.

Independent Review Committees

Science Advisory Board: $30,000

Membership for an independent review committee will be established according to the ROD. The Science Advisory Board's (SAB) mission will be to provide an on-going evaluation of the TRRP's overall application of an inter-disciplinary, science based (i.e. Hypothesis driven) adaptive management program for restoring the Trinity River ecosystem. The SAB is in addition, and complementary, to the technical review committees.

Information Management

Remote Sensing/Aerial Photography: $50,000

Includes remaining tasks needed to complete the November 2001 orthophotography for the Trinity River mainstem.

Supplemental EIS

Contracts/Amendments: $100,000

The primary contract with CH2M Hill was funded in FY 2002. Several possible contract modifications have been identified for FY 2003.

REHABILITATION AND RESTORATION

Bridges and Structures

Construction Contract 4 Bridges: $4,350,000

Activities will continue to award a construction contract for the replacement of four bridges across the Trinity River which are believed to be at risk from the ROD flows. An EA/EIR is being prepared by North State Resources, Inc. to analyze alternatives, with final designs being performed by Reclamation's Technical Service Center in Denver. Permits will be obtained by the Trinity River Restoration Program Office. Award of a construction contract for all the bridges (subject to the availability of supplemental funding) is scheduled for June 2003 which will allow all the bridges to pass the "extremely wet year" ROD flow of 11,000 cfs by May 2004.

Channel Restoration

Rush Creek Delta Removal: $200,000

Activities will continue to award a construction contract to remove to the extent practicable the existing delta at the mouth of Rush Creek. Reclamation's Technical Service Center in Denver is modeling various concepts to improve the routing of gravel through this area, protect existing properties, and be self maintaining under the ROD flows. An EA/EIR is being prepared by North State Resources, Inc. with FY02 program funding, with final designs being prepared by Reclamation's engineering staff in Sacramento. Permits will be obtained by the Trinity River Restoration Program Office. Award of the construction contract is scheduled for May 2003, with completion by September 30, 2003.

Mechanical Site Rehab Contract (2 pilots): $500,000
A localized complex of channel rehabilitation sites below Canyon Creek will be designed and constructed to test maintenance hypotheses and evaluate design concepts. The Hocker Flat area just downstream of Canyon Creek (site designations CK, CL, and CM) is currently the selected location. The California Dept of Water Resources has the lead in preparing the designs, using FY02 program funding, leading to award of a construction contract by June 15, 2003. NEPA and CEQA compliance is being prepared by North State Resources, Inc. also with FY02 program funding. The Trinity River Restoration Program Office will obtain the necessary permits and realty actions and perform the necessary construction contracting and construction management.

Bank Rehab Data Collection for Design: $50,000
Thirteen other mechanical rehab sites will be designed for future construction, with a mixture of available FY02 funding and FY03 funding. These include five by the Dept of Water Resources, six by the Hoopa Valley Tribe, and two by the Trinity River Restoration Program Office. Permits and realty actions will be undertaken by the Trinity River Restoration Program Office, and contracts prepared for award in FY04.

Gravel Introductions
NEPA Gravel Projects: $40,000
A total of $40,000 will be used by the Trinity River Restoration Program Office for NEPA/CEQA compliance and obtaining permits in support of both short and long term gravel introduction projects scheduled for construction in FY03. Efforts will be made to implement the Cableway contract which was awarded in FY02, but deferred pending resolution of a protest filed by California Trout, Inc. during the permit process.

Long Term Gravel Introductions: $200,000
The Trinity River Restoration Program Office will award a contract to process and stockpile 10,000 cubic yards at an appropriate site(s) in Lewiston sometime in early FY03. A RFP will be developed and solicited to identify local contractor's capability to input the gravel to the river during high flow events. It is noted environmental studies will have to be completed, and that considerable public involvement through the process of finalizing the gravel management plan will be required prior to moving forward with this program.

Sediment Management
Hamilton Ponds Dredging: $150,000
The Hamilton sedimentation ponds on Grass Valley Creek must have sufficient capacity to prevent sediment originating in the watershed from entering the Trinity River. Topographic / bathymetric monitoring after storm events will be conducted and contract dredging will be preformed as needed to maintain sediment trap efficiency. Methods will be investigated to allow the ponds to be excavated during high flow conditions immediately after flood events.

Tributaries

Trinity County Watershed Grants: $200,000

Continue funding the Trinity River Basin Fish and Wildlife Restoration Grant Program administered by Trinity County. The intent of the grant program is to fund uniquely qualified projects that are consistent with the goals for the Trinity Management Council. Grant proposals to rehabilitate the main stem and tributary watershed (below Lewiston Dam), meet Total Daily Maximum Loads (TMDLs), and increase fish survival/production will be solicited through a separate RFP process administered by Trinity County.

MONITORING AND ANALYSIS

Hydrology/Geomorphology

Sediment Monitoring

Deadwood, Grass Valley, Indian, and Rush Creeks: $184,000

Continue course sediment monitoring Deadwood, Rush, Grass Valley, and Indian creeks by the Hoopa Valley Tribe. Monitoring will include bedload sampling (helley smith), spot suspended sediment sampling, turbidity, and topographic surveys of tributary deltas and Hamilton Ponds. Installation of turbidity monitoring probes at streamflow gages stations without such probes is required. Calculate total sediment yield from the tributaries.

Sediment Management

Refine/Calibrate Transport Model: $115,000

Complete on-going sediment transport modeling of the Trinity River mainstem near the Rush Creek and Indian Creek deltas. Each delta is being modeled separately. Conduct an alternatives analysis to evaluate design alternatives for the Rush Creek and Indian Creek removal projects. Work is being conducted by the U.S. Bureau or Reclamation, Denver Technical Center.

Gravel Management Plan (Phase 2): $40,000

Phase 1 of the Gravel Management Plan will identify all potential gravel injection locations on the main stem Trinity River, amount and type of gravel to be injected, placement techniques, and the rational for the gravel augmentation. Phase 2 will build on Phase 1 to: identify dredge tailing locations for potential use as source material, amount and type of material at each dredge tailing location, determination of possible mercury contamination, potential access, logistics, cost of removal and processing and stockpiling locations. Convene a technical workshop to present draft findings and finalize Phase 2 of the Gravel Management Plan. Work will be conducted through a contract modification of the Phase 1 contract.

Bank Rehab Sites Geomorphic Baseline Monitoring: $40,000

On-going geomorphic monitoring by the Hoopa Valley Tribe to document the baseline channel morphology and complexity. Pre-construction monitoring will occur at 8 of the 16 proposed bank rehabilitation project sites and at 4 control sites. Post-construction monitoring will be conducted at the 3 bank rehabilitation sites scheduled for construction in FY 2003.

Documentation to include preparation of a site map and descriptions identifying geomorphic features, channel cross-section surveys at established locations, particle size sampling (pebble counts and bulk samples) at representative locations throughout the site, a longitudinal profile survey. Scour cores are to be constructed and surveyed for future monitoring. Where possible, work is coordinated with the concurrent project design, sediment / hydraulic modeling, and biological and sediment monitoring efforts.

Fish Physiology

Water Temperature Monitoring: $25,000

Continue monitoring water temperature at specified locations for use in the SNTEMP model, and for validation testing. Verify model predictions with actual measurements.

Smolt Health

Lab Studies, Smolt Response to Thermal Conditions: $25,000

Determine effects of various temperature ranges (above and below recommendations) on juvenile chinook, coho, and steelhead in terms of physiological responses, immunodefenses, and smolt development, and whether impacts are reversible under more favorable temperature conditions.

Fish Habitat/Management

Marking and Tagging

CWT Marking at Hatchery: $360,000

Coded Wire Tagging (CWT) is necessary to determine hatchery production from natural production, and assess harvest impacts on Trinity River chinook salmon.

Chinook Tag Decoding at Hatchery: $16,000

Recovery of CWT is necessary to determine hatchery from natural production and assess harvest impacts on Trinity River chinook salmon.

Mark Hatchery Steelhead: $72,000

Marking hatchery steelhead provides managers with data necessary to assess status of the hatchery production program as well as the relative contribution of hatchery versus natural production.

Run Size/Angler Harvest

Angler Harvest, Estuary to Coon Creek: $65,000

Long term data collection provides area specific harvest data for determining brood year production.

Angler Harvest, Weitchpec to Hawkins Bar: $72,000

Long term data collection provides area specific harvest data for determining brood year production.

Tribal Harvest Survey, Lower Klamath: $150,000

Long term data collection provides area specific harvest data for determining brood year production.

Baseline Monitoring
Riparian/Wildlife Monitoring Workshop: $40,000
Conduct 2-day workshop with local and external experts. Develop a list of key indicator species for monitoring various wildlife and plant taxa (i.e., mammals, birds, reptiles, amphibians, plants) for bank rehabilitation sites. Develop sampling strategies for plant and wildlife species at each of the proposed bank rehabilitation sites (i.e., plants line/band transects, bird point counts) to the valley wall in selected sampling units. Establish methods to monitor vertebrate line transects at proposed bank rehabilitation sites, bird point counts and plant sampling band transects to the valley wall in selected sampling units. Define sampling units, appropriate for wildlife and plant habitats, in alternate bar and un-rehabilitated (bermed) reaches (i.e. backwater, side channel, exposed point bar, pool tail, riffle, terrace, undercut bank, plant series, etc.). Qualitatively define target riparian hardwood stand structure (species composition - series, locations, acreage)**.**

8. Application Forms

insert copies of pdf files here.